

1.1
1225
S2
m. 4

Engineering

ENGINE STORAGE

STURTEVANT CATALOGUE NO. 60

Mell Corp
Boston

Crushing
Grinding-

Catalog No. 1062
Year of Issue 1908
Please return to
Section No. 52

Catalog Library
Department of Mining Engineering





Crushing and Grinding Machinery



(Patented)

STURTEVANT MILL CO.

WORKS AND OFFICES

HARRISON SQUARE, BOSTON, MASS., U. S. A.

Only Eight Minutes' Ride from South Terminal Station, Boston, N. Y., N. H. & H. R. R.
Field's Corner and other Electric Cars

STURTEVANT ENGINEERING CO., Ltd.

London

Glasgow

Paris

Berlin

Vienna

AGENCIES

Norway

Japan

Russia

So. Africa

Chili

BUSINESS NOTICE

TERMS OF SALE.

Unless otherwise specified, and previously agreed to, and to those customers who have not established credit relations with us, our terms are always one-third cash with order, and the balance when goods are ready to ship. All contracts are made subject to cancellation by this Company in case of casualties, labor trouble, or fire.

REMITTANCES.

Remittances should be by New York, or Boston checks, otherwise the cost of collection will be charged.

SHIPMENTS.

State clearly whether shipment is desired by freight, or express, and by what route. We do what we believe best for patrons if no directions are given.

CLAIMS FOR DAMAGES.

Claims for damage of goods in transit *must be made* of the Transportation Companies. Our responsibility ceases on delivery by us f. o. b. and receipted for by the local R. R. Agent, or other official, as received by him from us in good order. In case of damage notify the Transportation Company *at once*.

CODE.

Leiber, Western Union and Private Codes. Cable Address, "Emery-stone," Boston.

Telephones, 649 and 650 Dorchester.

SHIPMENTS TO US.

Should be directed,

STURTEVANT MILL COMPANY,

Harrison Square, BOSTON, MASS., U. S. A.

If by freight, care of N. Y., N. H. & H. R. R.

If by express, care of Dorchester Express Co.

All Freight and Express Shipments to us must be Prepaid.

PREFACE

The years bring experience ;
Experience precedes excellence.

VALUE OF EXPERIENCE.

Knowledge gained in producing high class crushing and grinding machinery for many years has a real value. Designs tested by thousands of patrons, and faults discovered and corrected, form a strong basis for confidence.

It is only *gradually* that good machines are evolved. That they do not break is because we have learned where to make them strong: that they give a maximum output is because experience has taught how to make them effective. But most important of all, their *limitations* have been discovered. What each will do is generally known, and in most cases what it *will not do*.

No machine is sold unless believed fit for its purpose. Machinery that is sure to run well and give no trouble, is certain of appreciation. No Crusher, or Roll, or Mill, is allowed to leave these works until it has been *run and found to be right* in every particular.

TESTING ROOM.

In this department, thoroughly equipped with constructions of *full size, opinions* as well as machines are tested. Patrons bring here all sorts of material to be reduced, and decisions have been made of great importance to them.

The output and adaptability of any machine need seldom be a matter of doubt for it can generally be tested here as thoroughly as may be required.

SAMPLE GRINDING.

Sample materials sent us will be reduced *free* if transportation is prepaid. Manufacturers do well to come themselves or send a representative to see sample grinding. Correct judgments are thus formed of the quantity, quality and economy of Sturtevant Crusher, Roll, Mill and Screen work. Our machinery is always prepared to run, and visitors are cordially invited.

QUALITY.

The Sturtevant Mill Co. makes only *first-class machines*. Each is the *best it can produce*.

CATALOGUES

THE LARGEST LINE OF ROCK AND ORE

From which may be selected machines of the best types applicable to every material and condition.

Principal Machines and the Catalogue number in which they will be found.

CRUSHERS.	Catalogue No.
Jaw Breakers . . .	69-73
Gyratory Breakers . . .	75
Steel Rock and Ore Breakers . . .	69
Blake Crushers . . .	73
Rock Smashers . . .	69
Duplex Coarse Breakers . . .	69
Duplex Intermediate Crushers . . .	69
Dodge Crushers . . .	73
Roll Jaw Fine Crushers . . .	62
Rotary Fine Crushers . . .	63
"Open Door" Crushers . . .	63
"Open Top" Crushers . . .	63
Sectional Breakers . . .	60-73
Sectional Fine Crushers . . .	60
Portable Crushers . . .	66
Portable Crushing Plants . . .	66
Laboratory Crushers . . .	67
ROLLS.	
Balanced Rolls . . .	65
Special Rolls . . .	65
Geared Rolls . . .	65
Centrifugal Rolls . . .	65
Sectional Rolls . . .	65
Laboratory Rolls . . .	67

GRINDING MILLS	Catalogue No.
Ore Mills . . .	68
Chilian Mills . . .	68
Huntington Mills . . .	68-72
Sectional Mills . . .	68-72
Stamp Mills . . .	68
Ball and Tube Mills . . .	76
Pan Mills (Wet and Dry) . . .	71
Horizontal Emery Mills . . .	64
Vertical Emery Mills . . .	64
Rock Emery Millstones . . .	64
Buhr Mills . . .	64
Sample Grinders . . .	67
POWER.	
Steam Engines and Boilers . . .	70
Gasoline Engines . . .	70
Portable Engines (Gasoline and Steam)	70
SCREENS.	
Screens (all kinds) . . .	74
Newaygo Separator . . .	77
ELEVATORS & CONVEYORS.	
Belt and Chain . . .	74

IMPORTANT

Machinery, conditions and materials vary so greatly, that we request the following information, given as completely as possible, when writing for quotations. Thus we can answer intelligently, and specify the size and type of machine best suited to your requirements :—

INFORMATION REQUESTED

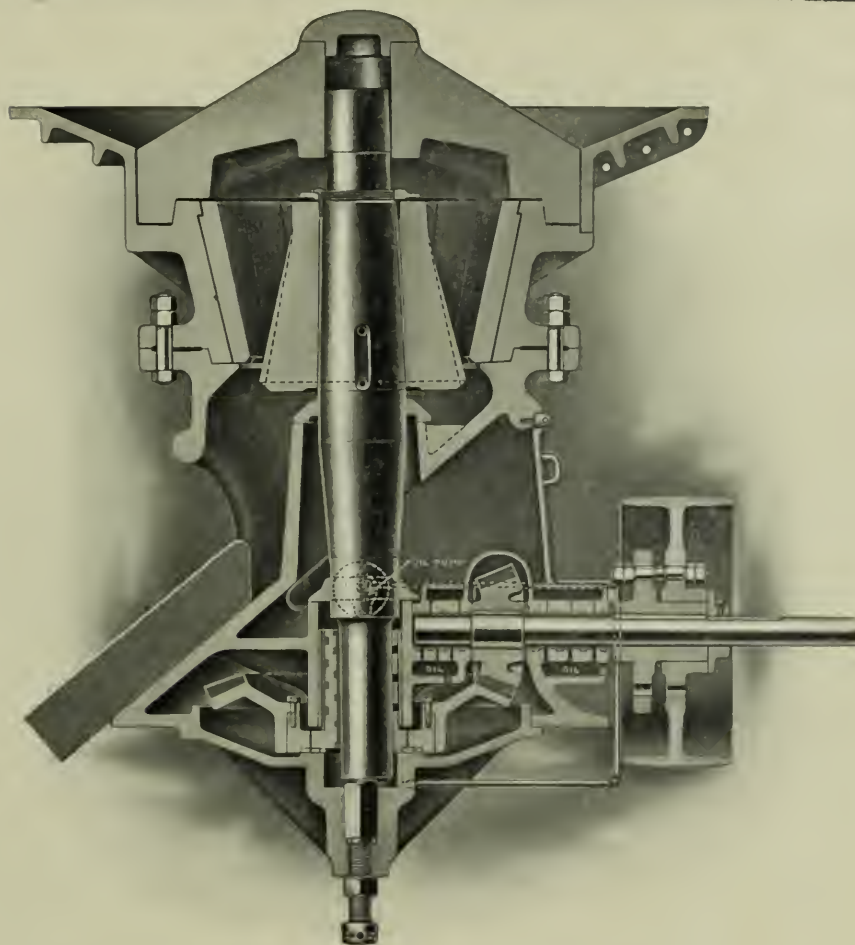
MATERIAL (to be handled): CONDITION (wet or dry): CHARACTER (hard or soft): SIZE (before feeding to machine): FINENESS of product wanted: CAPACITY wanted in tons per HOUR: MACHINES you are NOW USING.

TESTING ROOM

In this department of our works thoroughly equipped with constructions of *full size*, opinions as well as machines are tested. Patrons bring here all sorts of material to be reduced, and decisions have been made of great importance to them. The output and adaptability of any machine need seldom be a matter of doubt, for it can generally be tested here as thoroughly as may be required.

Sample materials sent us will be reduced *free* if transportation is prepaid. Manufacturers do well to come themselves or send a representative to make these tests.

ROTARY GYRATING BREAKERS



These great machines are especially adapted for crushing rocks for mines, streets or railroads. The capacity in the large sizes is enormous. Write for further particulars, price, etc. Send for Catalogue No. 75.

Code Word	Size	Dimensions of each receiving opening in.	Dimensions of Combined Opening in.	Capacity per hour in tons (2000 lbs.) macadam or ballast size, to pass 2½ in. ring	Dimen. of Driving Pul. Inches		Rev. of driv. pulley per min.	H. Power for crusher, elevator and screen	Approx. Weight of Crusher in lbs. Nett	Approx. Weight of Crusher in lbs. Gross
					Diam.	Face				
Becwori	2	8 x 22	8 x 44	5 to 10	24	8	450	12 to 15	10000	11500
Beetlo	3	8½ x 24	8½ x 48	10 to 20	28	10	425	20 to 25	15500	16500
Befango	4	9 x 27	9 x 54	15 to 30	32	12	400	25 to 30	23500	24500
Befasir	5	12 x 35½	12 x 71	25 to 50	36	14	375	30 to 50	32000	34200
Befgart	6	12½ x 37	12½ x 74	45 to 90*	40	16	350	40 to 60	44000	46500
Begader	7½	14 x 44	14 x 88	90 to 150†	44	18	350	75 to 125	67500	71750
Begalt	8	19 x 60	19 x 120	130 to 225‡	48	20	350	100 to 150	100000	102000

* To 3-inch size.

† To 3½-inch size.

‡ To 4-inch size.

Subject to change without notice.

BLAKE ROCK CRUSHERS



Send for Catalogue No. 73.

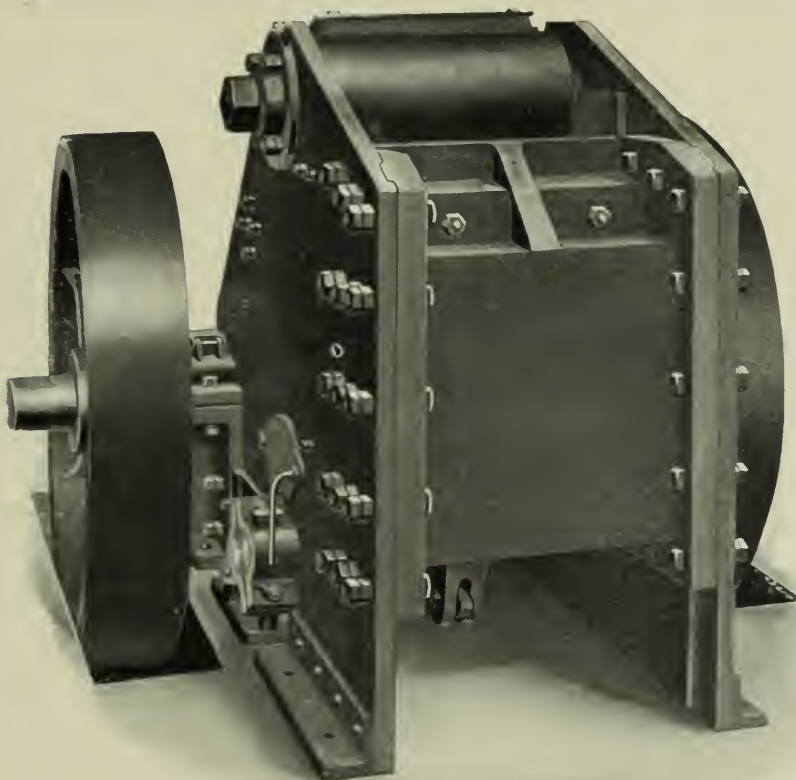
The Blake Rock and Ore Breaker.

DIMENSIONS, WEIGHTS, ETC., OF BLAKE ROCK BREAKERS.

Code Word	Size of Receiving Opening	Capacity per Hour in Tons	Approx. Weight of Heaviest Piece	Approx. Total Weight net	Approx. Weight Gross	Extreme Dimensions Including Shafts						Driving Pulley	Proper Speed	Horse Power Required
						Length		Breadth		Height				
						Ft.	In.	Ft.	In.	Ft.	In.			
Blaklab	4½ x 1½		Lbs.	Lbs.	Lbs.	1	8	1	0	1	3	8 x 2		
Blaken	10 x 4		40	160	180	4	3	6	1½	3	11	20 x 6½	250	4
Blako	10 x 7 *	4	2085	5100	5600	5	4	6	5	4	5	24 x 8½	250	7
Blaking	15 x 9	11	4250	8540	9540	6	8	8	10	5	3	24 x 11	250	10
Blakond	20 x 10	15	7520	16900	18500	7	6	8	7	5	1	30 x 12½	250	14
Blaketo	24 x 12	20	9690	22000	24000	10	0	9	10½	6	2	42 x 15	250	20
Blakic	24 x 18	25	22000	45000	48000							48 x 12	250	40
Blakrot	30 x 24	35		50000	55000							54 x 16	250	65
				60000	67000									

*Made Sectional also, see page 15. Subject to change without notice.

STEEL ROCK BREAKERS



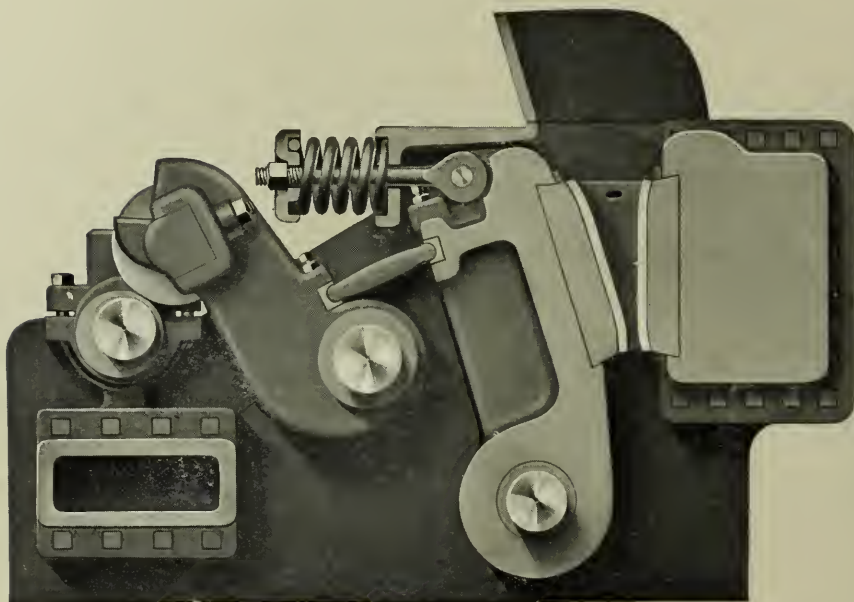
Patented

Steel Rock and Ore Breakers. Send for Catalogue No. 61.
Unbreakable Steel Plate Construction. For Crushing to 2 inch. size or coarser.

Size Jaw Opening in.	Capacity in tons per hour Jaws set apart 2 inches	Horse Power Approx.	Speed rev.	Pulley in.	Approx. Length	Approx. Width	Approx. Height	Approx. Weight of Heaviest Piece	Approx. Weight lbs. Nett.	Approx. Weight lbs. Gross
*Blace 7½ x 13	8 to 12	12	170	38 x 8	62 in.	51 in.	52 in.	730 lbs.	6,000	6,500
*Bleedo 9 x 15	12 to 18	15	155	48 x 9	74 in.	65 in.	65 in.	1,190 lbs.	8,500	9,600
*Blplex 10½ x 22 Duplex	18 to 30	20 to 25	150	48 x 9	80 in.	77 in.	81 in.	2,000 lbs.	13,000	14,000
*Bldfp 11 x 26	25 to 40	25	140	60 x 9½	101 in.	64 in.	72 in.	2,530 lbs.	19,000	21,150

*Code Word. Subject to change without notice.

ROCK SMASHER



Patent applied for

7 x 24 Rock and Ore Smasher.

Send for Catalogue No. 61.

An intermediate Crusher of great ability.

Crushes to 1 inch.

No rock too hard for it.

See Specifications on opposite page.

ROCK SMASHER



7 x 48 Duplex "Smasher."

Send for Catalogue No. 61.

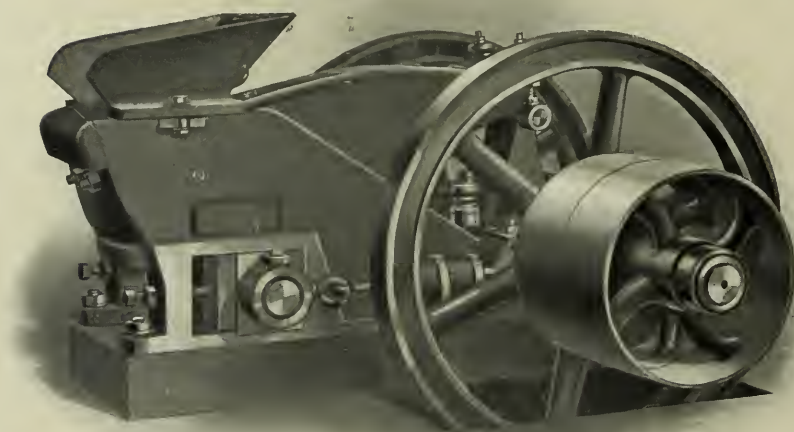
Large Capacity, fine and even Output.

ROCK AND ORE SMASHER SPECIFICATIONS.

Code Word	Jaw Openings Inches	Capacity per hour Jaws set to 1 inch	Horse Power Avg. jaw setting	Speed	Pulley	Approx. Length	Approx. Width	Approx. Height	Approx. Weight Heaviest Piece	Approx. Weight net	Approx. Weight gross
Advent	6 x 15	4 to 7	10 to 12	300	36 x 6	6 ft. 2½ in.	4 ft. 6 in.	3 ft. 6 in.	750 lbs.	6000 lbs.	7000 lbs.
Aíger	7 x 24	7 to 10	15 to 20	275	48 x 10	7 ft. 1 in.	6 ft.	4 ft. 4 in.	2100 lbs.	13000 lbs.	15000 lbs.
Adorn	{ 6 x 20 Duplex	8 to 14	20	300	36 x 6	6 ft. 2½ in.	6 ft.	3 ft. 6 in.	750 lbs.	10000 lbs.	12000 lbs.
Afice	{ 7 x 48 Duplex	14 to 30	30 to 40	275	48 x 10	7 ft. 1 in.	7 ft. 9 in.	4 ft. 4 in.	2100 lbs.	22000 lbs.	25000 lbs.

Subject to change without notice.

DODGE ROCK BREAKERS



Send for Catalogue No. 73.

An inexpensive Intermediate Crusher.

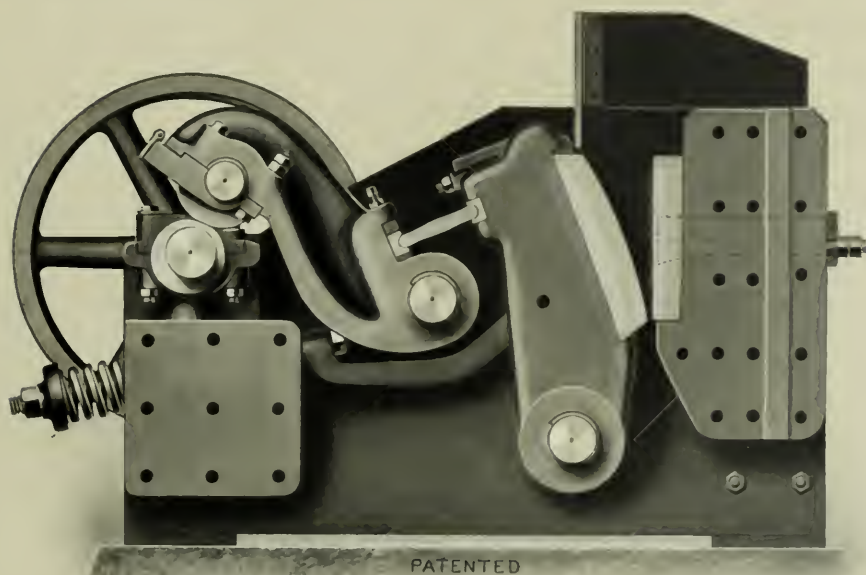
DIMENSIONS, WEIGHTS, ETC., OF DODGE ROCK BREAKERS.

Code Word	Size of Receiving Opening	Capacity per Hour in Tons	Approx. Weight of Heaviest Piece	Approx. Total Weight Net	Approx. Weight Gross	Driving Pulley	Proper Speed	Horse Power Required
	Inches.	Nut Size	Lbs.	Lbs.	Lbs.	Inches	Rev.	
Behrik	4 x 6	$\frac{1}{2}$ to 1	310	1100	1300	16 x 4	275	3
Behr	7 x 9	1 to 3	1035	3250	3800	24 x 5	235	6
Behissen	8 x 12	2 to 5	2000	5900	6800	30 x 6	220	10
Behklee	11 x 15	5 to 8	4015	13500	15000	32 x 13	210	15

For Sectional Crushers see page 15. Sizes 4 x 6, 7 x 9.

Subject to change without notice.

ROLL JAW FINE CRUSHERS



Patented—Patent Pending

The only Crusher able to crush large, hard rock to ½ inch, without Screens.

SIZES		Average Capacity in Tons	Rev.	Pulley	Horse Power	Length	Width	Height	Heaviest Piece	Approx. Weight Nett	Approx. Weight Gross
Receiving Opening	Jaws Set Apart	Per Hour	Per Minute	Diam. and Face in inches	Est. Avg.	Extreme	Extreme	Extreme	Approx. Weight	Total Approx.	Total Approx. lbs.
LABORATORY 1½ in. x 3 in. *Baeller	⅛ in.	75 lbs. to 150 lbs.	400	12 x 2	HAND	1 ft. 6 in.	1 ft. ½ in.	1 ft. 2 in.	50 lbs.	135 lbs.	160
LABORATORY 2 in. x 6 in. *Baer	⅛ in.	250 lbs. to 600 lbs.	350	18 x 3	¼	2 ft. 2 in.	1 ft. 10 in.	1 ft. 8 in.	300 lbs.	700 lbs.	845
4 in. x 8 in. *Bareto	¼ in.	½ to 1	350	30 x 4	1½ to 3	4 ft. 1 in.	3 ft. 2 in.	2 ft. 11 in.	1200 lbs.	2500 lbs.	3000
4 in. x 12 in. *Barving	½ in.	1½ to 2	250	30 x 6	4 to 6	5 ft. 2 in.	4 ft. 0 in.	3 ft. 1 in.	2300 lbs.	6000 lbs.	6600
6 in. x 15 in. *Botox	½ in.	2 to 3	300	36 x 6	10	6 ft. 2½ in.	4 ft. 6 in.	3 ft. 6 in.	750 lbs.	6000 lbs.	7000
7 in. x 24 in. *Batten	½ in.	3 to 5	275	48 x 10	15 to 20	7 ft. 1 in.	6 ft. 0 in.	4 ft. 4 in.	2100 lbs.	13000 lbs.	15000
6 in. x 30 in. Duplex *Boater	½ in.	4 to 7	300	36 x 6	20	6 ft. 2½ in.	6 ft. 0 in.	3 ft. 6 in.	750 lbs.	10000 lbs.	12000
7 in. x 48 in. Duplex *Bating	½ in.	7 to 10	275	48 x 10	30 to 40	7 ft. 1 in.	7 ft. 9 in.	4 ft. 4 in.	2100 lbs.	22000 lbs.	25000

*Code Word.

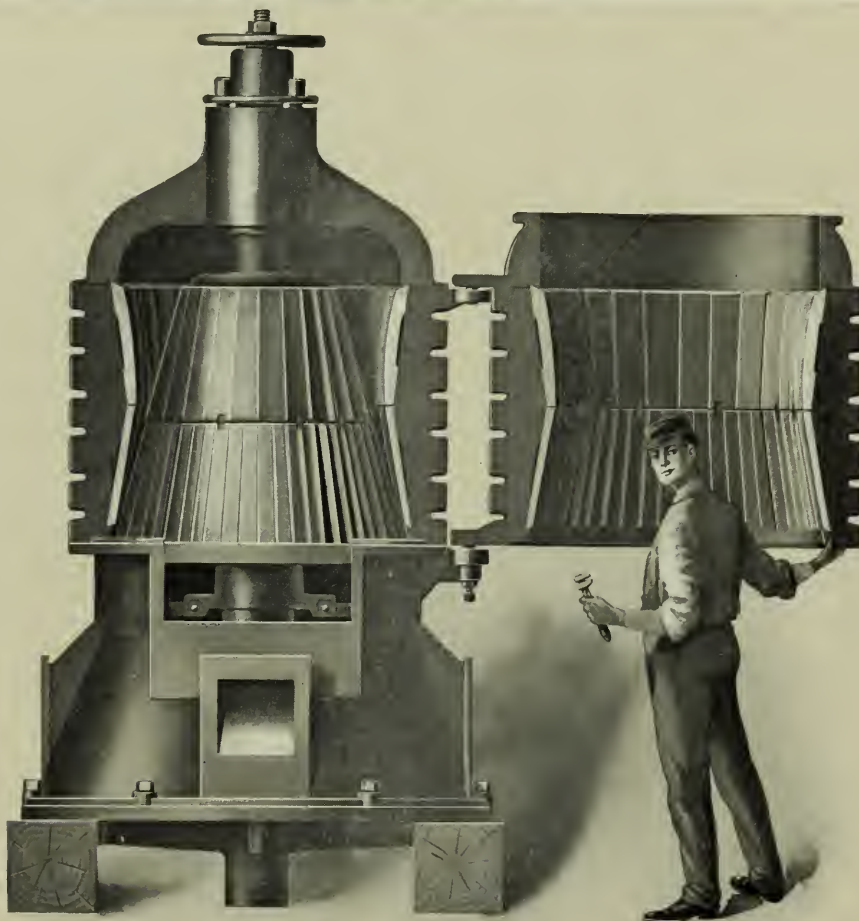
All sizes larger than 4 x 12 have Steel Plate Construction, Cam and Roll action, all sizes smaller are of Cast Iron with Pitman.

Send for Catalogue No. 62.

11

Subject to change without notice.

OPEN DOOR ROTARY FINE CRUSHERS



Patented—Patent Pending
Send for Catalogue No. 63.

Crushes soft and moderately hard rocks to $\frac{1}{4}$ inch and finer, without screens.

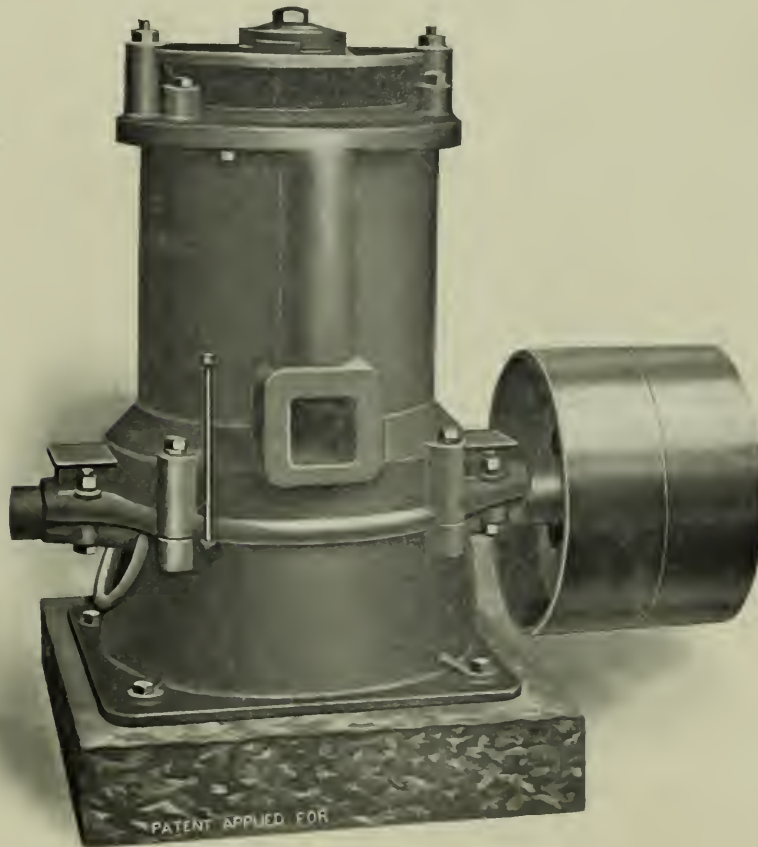
Code Word	No.	Hopper Open- ing†	Approx Cap. Tons per Hr.	Approx Horse Power	Speed Rev.	Pulley Dia. Face	Length	Width	Height	Approx. Weight Nett	Approx. Weight Gross lbs.
BION . . .	0*	6x10 in.	$\frac{1}{2}$ to 2	3 to 4	250	18 x 6	4ft. 2in.	2ft. 1in.	3ft. 6in.	1300 lbs.	1600
BIACCHI .	1	13x18 in.	1 to 6	6 to 10	300	24 x 8	6ft. 7in.	3ft. 2in.	6 ft.	4000 lbs.	4700
BISTRO . .	2	18x29 in.	8 to 15	15 to 20	250	30 x 12	8ft. 8in.	3ft. 10in.	7ft. 2 $\frac{1}{2}$ in.	9000 lbs.	10500
BIVQERT .	3	26x35 in.	15 to 35	25 to 30	250	36 x 16	10ft. 0in.	5ft. 3in.	10ft. 5in.	20000 lbs.	22000

*"Open Top" Design.

†These dimensions do not mean the size rock the machine can grip.

Subject to change without notice.

ROTARY FINE CRUSHERS



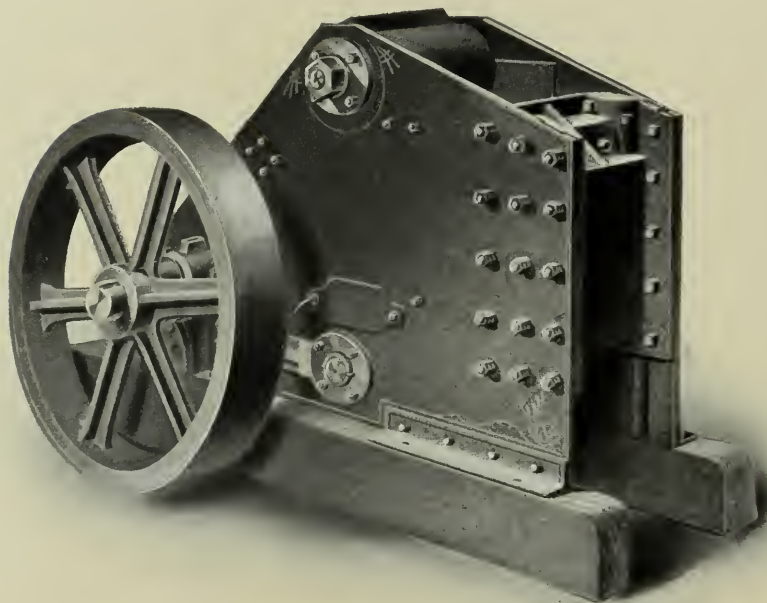
No. 0 Open Top Rotary Crusher

Send for Catalogue No. 63.

Crushes soft and moderately hard rocks to $\frac{1}{8}$ inch without screens.

See Specifications on opposite page.

SECTIONAL MACHINERY



Send for Catalogue No. 69.

Semi-Sectional.

Can be knocked down small enough to be easily transported to difficult situations.

STURTEVANT STEEL ROCK AND ORE BREAKERS.

Code Word	Size Jaw Opening	Capacity in tons per hour Jaws set apart 2 inches	Horse Power Approx.	Speed rev.	Pulley in.	Approx. Weight of Heaviest Piece lbs.	Approx. Weight lbs. Nett	Approx. Weight lbs. Gross
Blace	7½ x 13	8 to 12	12	170	30 x 8	730	6000	6500
Bleedo	9 x 15	12 to 18	15	155	48 x 9	1190	8500	9600
Bplex	10½ x 22 Duplex	18 to 30	20 to 25	150	48 x 9	2000	13000	14000
Bldfp	11 x 26	25 to 40	25	140	60 x 9½	2530	19000	21150
ROCK AND ORE SMASHERS.								
		Jaws set at 1 in.						
Advent	6 x 15	4 to 7	10 to 12	300	36 x 6	750	6000	7000
Afger	7 x 24	7 to 10	15 to 20	225	48 x 10	2100	13000	15000
Adorn	6 x 30 Duplex	8 to 14	20	300	36 x 6	750	10000	12000
Afice	7 x 48 Duplex	14 to 30	20 to 40	225	48 x 10	2100	22000	25000

Subject to change without notice.

SECTIONAL MACHINERY



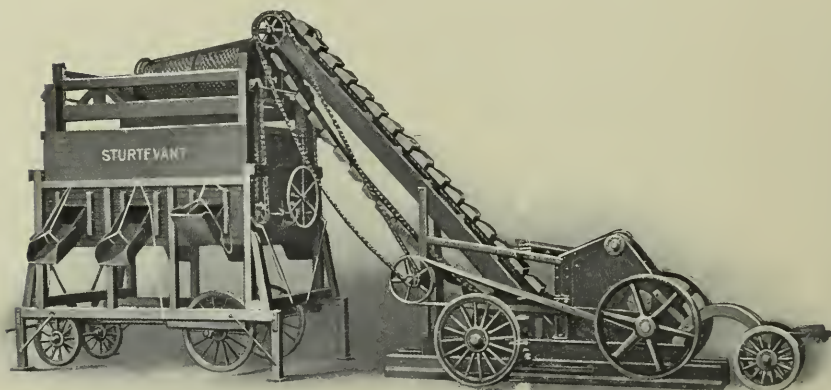
For Mule-back transportation. No parts weigh over 300 to 350 lbs.

BLAKE CRUSHERS.								
Size of Jaw Opening Inches	Size of Pulley Inches	Approx. Horse Power	Approx. Capacity per hour Tons	Speed R. P. M.	Approx. Weight Heaviest Piece lbs.	Approx. Weight Complete lbs. Nett	Weight Approx. lbs. Gross	Code Word
7 x 10	24 x 8½	7	7 to 8	250	350	9600	10800	Blakon
9 x 15	32x10	12	12 to 16	250	350	16000	18000	Blaking
DODGE CRUSHERS.								
4 x 6	20 x 4	2 to 4	¾ to 1	250	300	1200	1300	Bekon
7 x 9	24 x 5	4 to 7	1 to 3	235	350	3250	4000	Bekker
ROLL JAW CRUSHERS.								
4 x 8	30 x 4	3	½ to 1	350	325	2000	2500	Baerprs
Size of Rolls	CRUSHING ROLLS.							
12 x 12	48 x 8	4	Depends on Setting	150	350	3600	4200	Sectare
16 x 10	48 x 5	4		150	350	5000	6000	Sectary
20 x 12	60 x 10	5		120	350	6500	7500	Sectong
27 x 14	80 x 12	10		100	350	13000	15000	Sectkon
Size	HUNTINGTON MILL (Geared Type).							
3½ ft.	20 x 6½	5	½ to ¾	138	300	7000	8000	Huntsec
5 ft.	30 x 8½	8	1 to 2	140	350	15000	17000	Hunting
STAMP MILLS (Quadruple Discharge).								
Number of Stamps in Battery	Weight of Stamps Lbs.	Approx. Horse Power	Approx. Capacity 24 Hours Tons	Drops per Minute	Approx. Weight Heaviest Piece lbs.	Approx. Weight Complete lbs. Nett	Approx. Weight Complete lbs. Gross	
2	1000	4	10 to 14	110	325	11000	13000	Lazy
4	1000	8	20 to 28	110	325	22000	26000	Latro
Stamp Mills (Standard design) made Sectional in nearly all sizes.								

Stamp Mills (Standard design) made Sectional in nearly all sizes.

Subject to change without notice.

PORTABLE CRUSHING PLANT



Patented

Send for Catalogue No. 66.

Portable Crushing Plant complete in every detail.

Crusher, Elevator, Revolving Screen and Special Telescope bin. The best built.

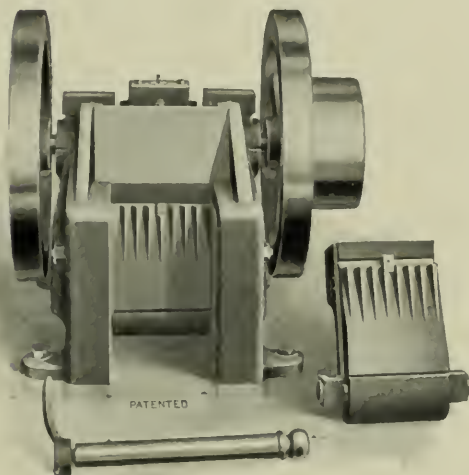
Several Combinations of Portable Crushing Plants.

Size of Crusher	Mounted Crusher, Elevator and Chute Screen			Mounted Crusher, Elevator and Round Screen			Mounted Crusher, Elevator, Round Screen and Regular Portable Bin*			Mounted Crusher, Elevator, Round Screen and Special Telescopic Bin*			Mounted Engine and Boiler of Suitable Power			Capa- city of Plant 2½ in. Setting
	Jaw Opening inches	Weight lbs. Approx.		Code Word	Weight lbs. Approx.	Code Word	Weight lbs. Approx.	Code Word	Weight lbs. Approx.	Code Word	Weight lbs. Approx.	Code Word	Weight lbs. Approx.	Code Word		
Net	Gross		Net	Gross		Net	Gross		Net	Gross		Net	Gross		Tons per Hour	
7½ x 13	9700	10500	Fekaco	10200	11500	Fekdpe	14000	16000	Feklit	16000	18000	Feklon	8300	10000	Enjon	8 to 12
9 x 15	12500	15000	Fekale	13500	17500	Fekkon	17000	20000	Feknes	19000	22000	Fekman	10300	12000	Enkog	12 to 18
10½ x 22	16500	19000	Felkany	18000	22000	Feklg	21500	24500	Fekop	23500	26500	Fekmabe	11100	13500	Enline	18 to 30

*Capacity of bins—10 to 12 tons. We also supply these of 25 and 35 tons capacity.

Subject to change without notice.

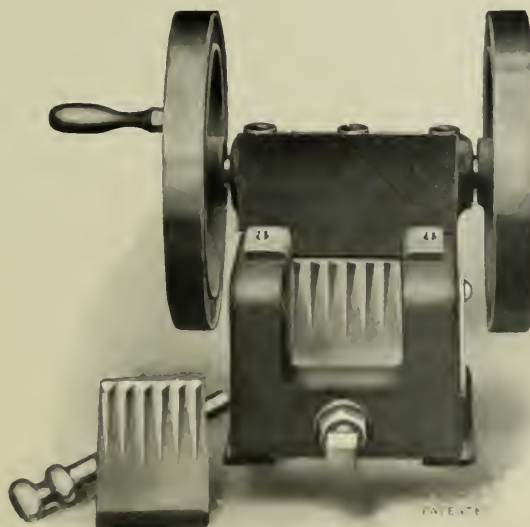
LABORATORY CRUSHERS



Send for Catalogue No. 67.

The only strictly High Grade
Laboratory Crusher built.

See Specifications page 11.

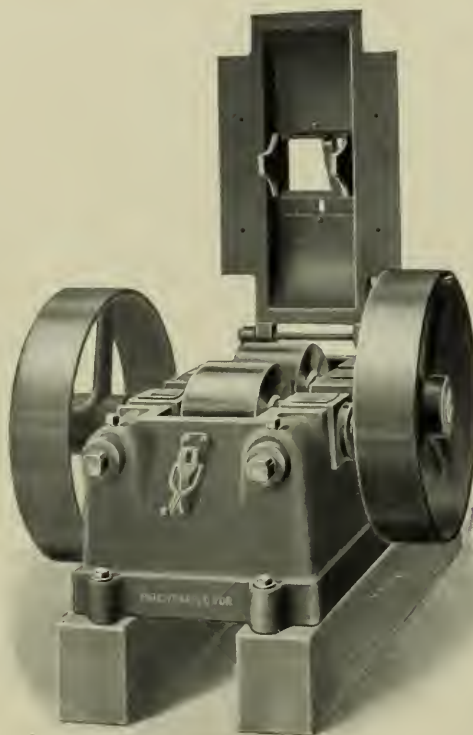


LABORATORY ROLLS

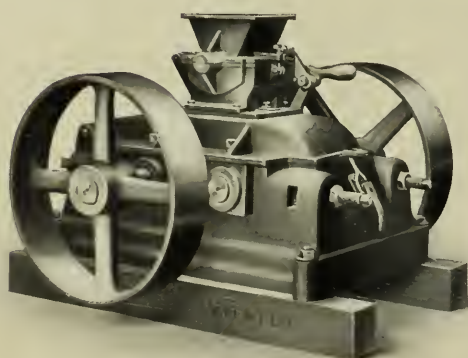
High Grade Laboratory Machinery.

Send for Catalogue No. 67.

Open for Cleaning.



Patented



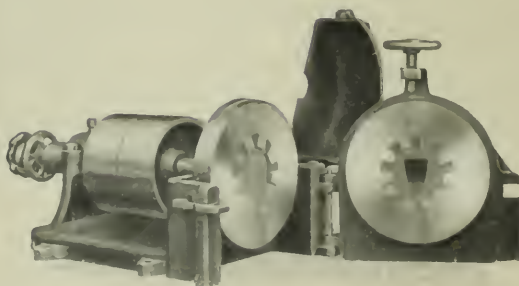
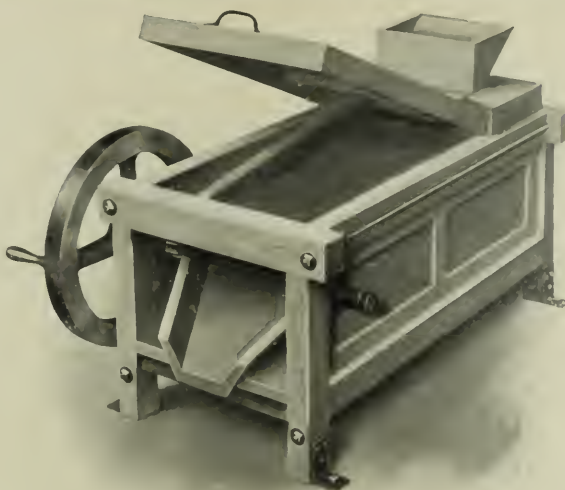
A perfect Crushing Roll
in Miniature with Automatic
Feeder.

See Specifications page 22.

SAMPLE GRINDERS

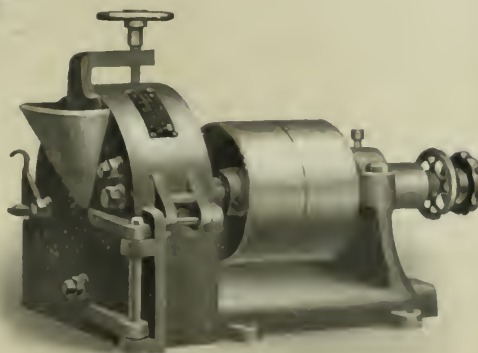
Send for Catalogue No. 67.

Laboratory Screens.

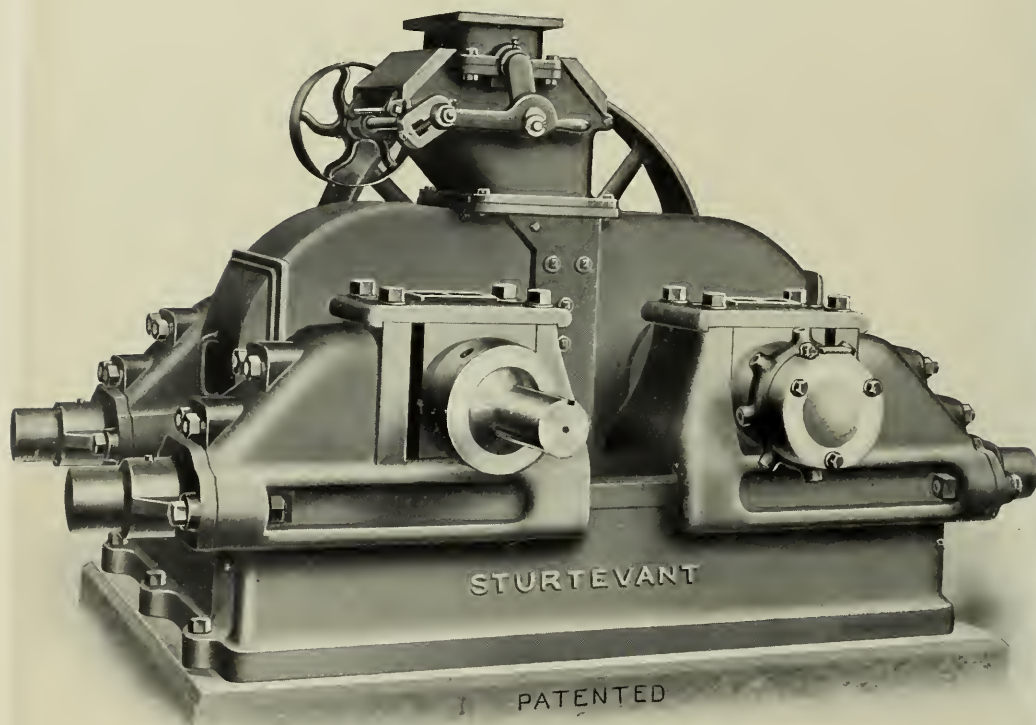


Sample Grinder.
Open for Cleaning.

A complete line of Sample
Machinery.



BALANCED ROLLS



Send for Catalogue No. 65.

36 in. x 16 in. Balanced Rolls.

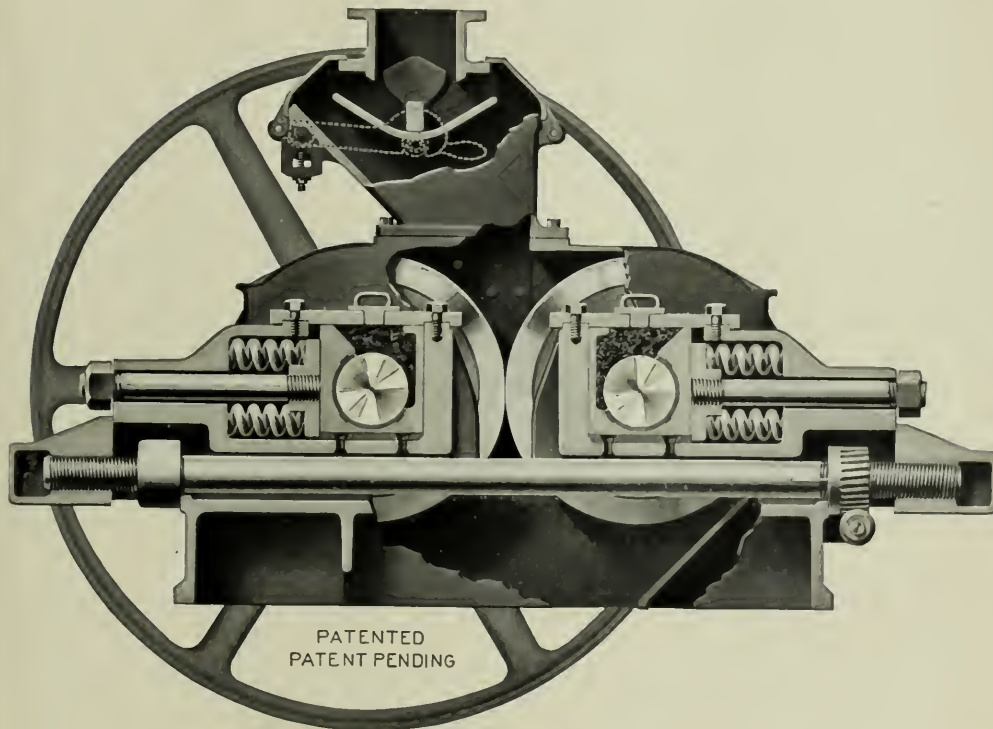
Crushing shocks **quartered**.

Notice its massive and simple construction.

Adjustment *automatic* and cannot be wrong.

See Specifications on page 22.

BALANCED ROLLS



Send for Catalogue No. 65.

26 x 15 Balanced Rolls.

The best Crushing Roll of its class.

See Specifications on page 22.

SPECIAL ROLLS



Patent applied for

16 x 10 Special Rolls with Automatic Feeder.

Send for Catalogue No. 65.

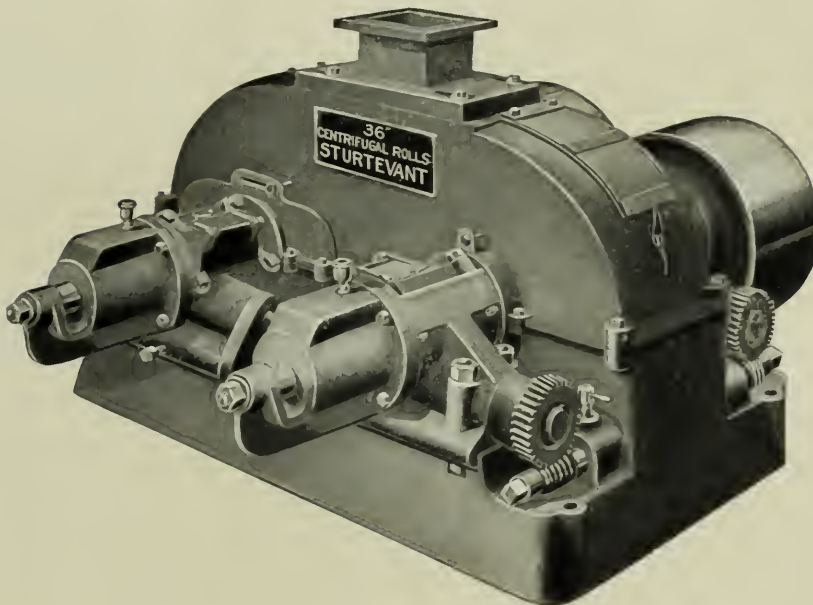
ROLL SPECIFICATIONS.*

Code Word	Size in.	Pulley in.	Approx. Horse Power	Speed r.p.m.	Approx. Length	Approx. Width	Height with Fly Wheel Approx.	Approx. Weight of heaviest piece	Approx. Weight Nett	Approx. Weight Gross
Billey	Laboratory 8 x 5	18 x 4	1	150	31 in.	28 in.	22 in.		650 lbs.	700 lbs.
Bonnie	Special 16 x 10	48 x 5	4	150	5 ft.	4 ft. 10 in.	4 ft.	1450 lbs.	5000 lbs.	6000 lbs.
Ceabo	Balanced 21 x 10	60 x 6	8	125	6 ft. 9 in.	6 ft. 3 in.	5 ft.	1500 lbs.	10000 lbs.	12500 lbs.
Ceaden	" 26 x 15	66 x 10	10	100	8 ft.	8 ft.	5 ft.	2000 lbs.	16000 lbs.	19000 lbs.
Ceasel	" 32 x 16	72 x 10	15	90	9 ft. 4 in.	9 ft. 1 in.	6 ft.	3500 lbs.	30000 lbs.	33000 lbs.
Ceatry	" 36 x 16	72 x 10	18	80	10 ft.	10 ft.	6 ft. 6 in.	4000 lbs.	32000 lbs.	35000 lbs.
Ceavon	Geared 40 x 20	42 x 12	25	60	10 ft.	10 ft.	6 ft.	7000 lbs.	40000 lbs.	44000 lbs.

*For Sectional Rolls see page 15.

Subject to change without notice.

CENTRIFUGAL ROLLS



Patented

Centrifugal narrow tired high Speed Rolls.

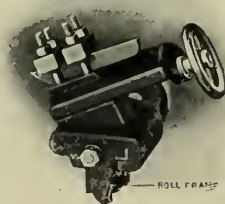
Send for Catalogue No. 65.

Code word with automatic Feeder	Sizes Diam. Face inches	Pulley Dia. and Face inches	Estimated H. Power average	Length	Width	Height with Feeder approx.	Approx. Weight of heaviest piece	Approx. Weight Nett.	Approx. Weight Gross
Cahilan	26 x 4½	18 x 10	8	6 ft. 0 in.	5 ft. 6 in.	4 ft. 2 in.	1300 lbs.	7500 lbs.	8000 lbs.
Cahoxen	36 x 6	28 x 12	15	7 ft.	7 ft. 3 in.	5 ft. 4 in.	3000 lbs.	16000 lb.	18000 lb.

For Sectional Rolls see page 15.

Subject to change without notice.

ROLL SHELL TURNING DEVICE



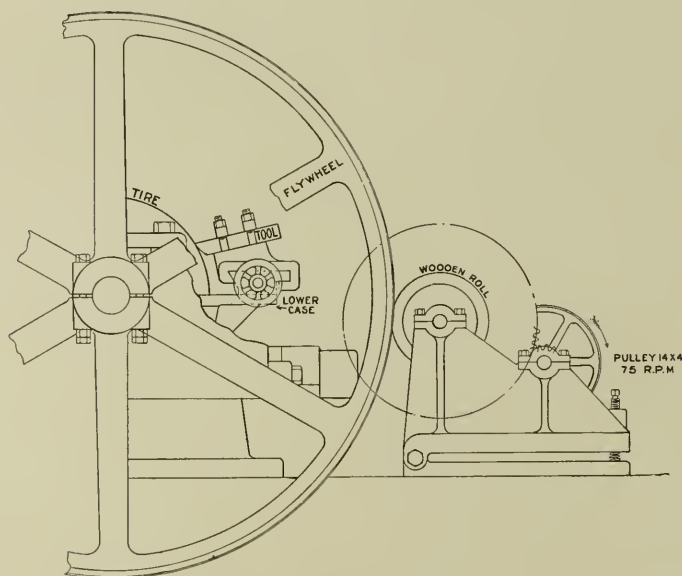
Patented

Turning Roll Shells.

We build a turning or trueing device by which Rolls tires may be kept perfectly smooth and even without even removing the Roll case, shafts or feeder.

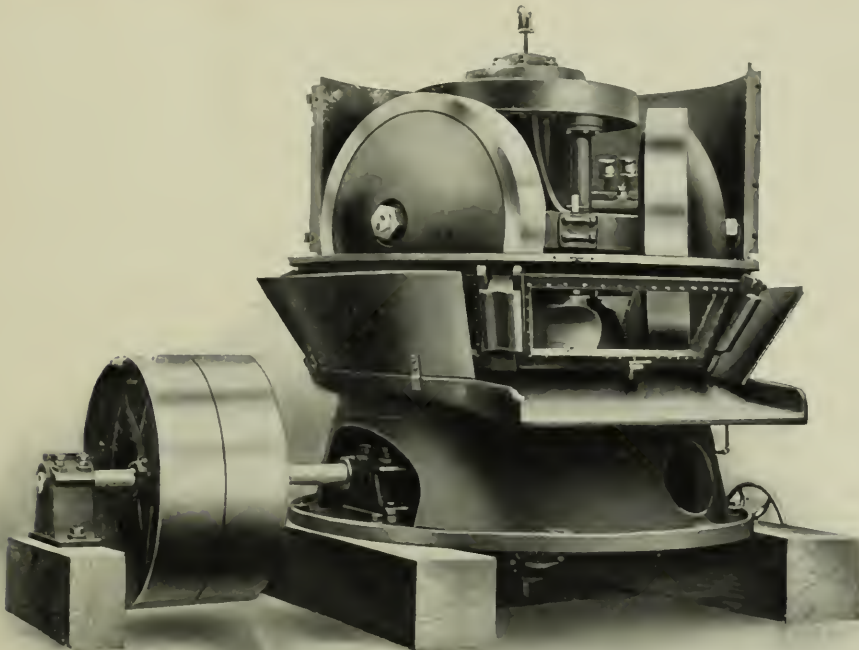
For Balanced Rolls approx. weight 685 lbs. *Code word Ctryx.*

“ Centrifugal “ “ “ 685 “ “ “ *Crisco.*



Send for Catalogue No. 65.

CHILIAN MILLS



Patents Pending

AKRON CHILIAN MILL.

Send for Catalogue No. 68.

This great massive machine will reduce hard or soft ores to nearly any fineness.

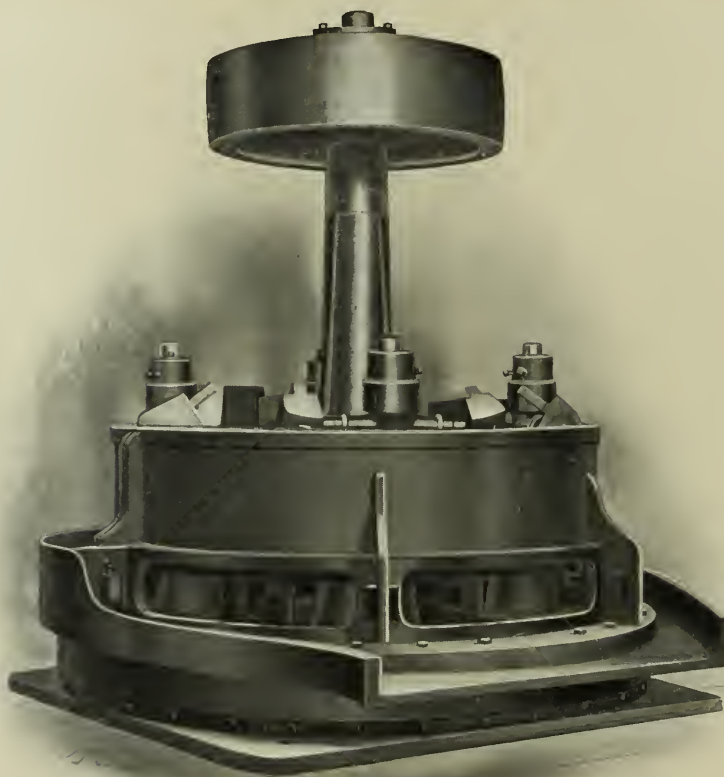
It is well adapted for concentration, amalgamation or leaching processes.

Its principal features are slow speed, small wear, accessibility, quick and easy adjustments, perfect lubrication, high efficiency and even distribution of feed.

Code Word	Size	Approx. Power	Capacity in 24 hours	Revolution of Mill per Minute	Speed of Driving Pulleys	Total Approx. Weight. Nett	Total Approx. Weight. Gross
<i>Dagin</i>	5 ft.	10	25 tons	35	170	32,000 lbs.	36,000 lbs.
<i>Dagger</i>	6 ft.	18	50 tons	30	148	48,000 lbs.	53,000 lbs.
<i>Dagell</i>	8 ft.	35	120 tons	20		98,000 lbs.	106,000 lbs.

Subject to change without notice.

IMPROVED HUNTINGTON MILLS



Patented

Send for Catalogue No. 68.

Pendular Direct Driven type.

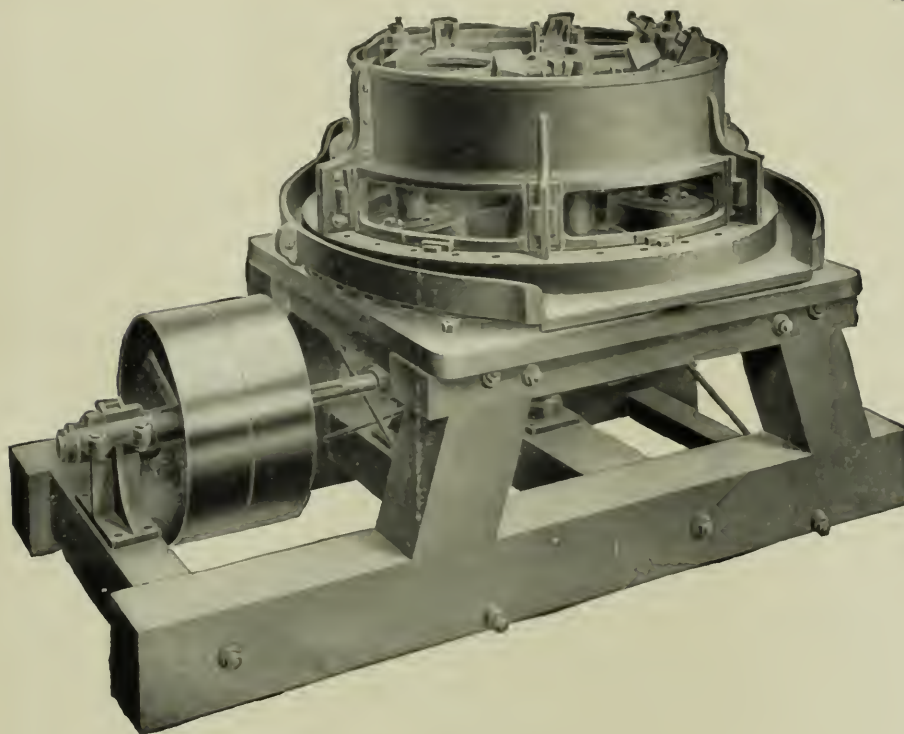
The direct drive is noiseless and more efficient than a geared mechanism.

The roller heads with ball bearings enable faster running, and greatly increase centrifugal pressures, and, of course, give larger outputs with the same expenditure of power.

Code Word	Size Diam.	Approx. Weight Heaviest Piece	Pulley	Rev.	Capacity per day 24 hours	H. P.	Nett Total Approx. Weight	Gross Total Approx. Weight
Eekace	5 ft.	5500 lbs.	36 x 10 in.	80	20 to 35 tons	6	11500 lbs.	13500 lbs.
Eejkend	6 ft.	9000 lbs.	40 x 10 in.	65	40 to 75 tons	8	18000 lbs.	21000 lbs.

Subject to change without notice.

IMPROVED HUNTINGTON MILLS



Send for Catalogue No. 72.

Geared Huntington Mill, Inexpensive, handy to belt, erect and run.

GENERAL DIMENSIONS, SPEED.

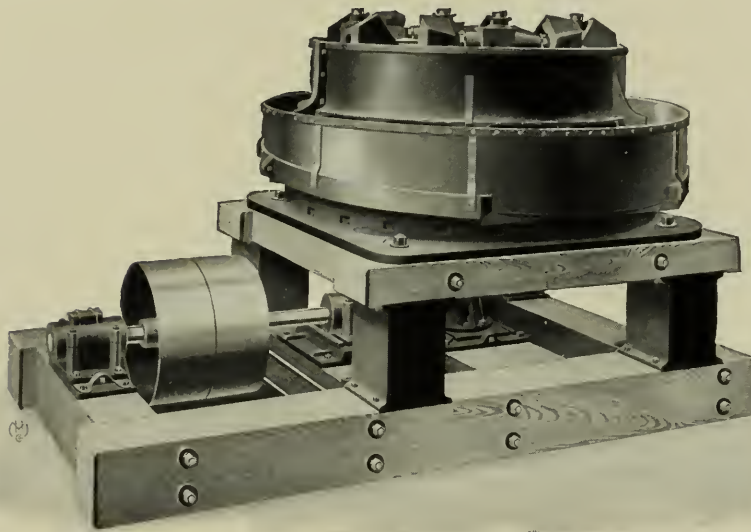
Code Word	Size	FRAME			Discharge Above Floor	Total Height	PULLEYS			H. P.	Approx. Weight Heaviest Piece	Approx. Total Wt. of Mill Complete net	Approx. Total Weight Gross
		Width	Length	Height			Dia. in.	Face in.	Rev.				
Gehunt	3½ ft. Reg.	4 ft. 1 in.	7 ft. 2 in.	2 ft. 4 in.	3 ft. 2½ in.	5 ft. 0 in.	20	6½	135	5	1592 lbs.	7000 lbs.	8000 lbs.
Gehang	5 ft. "	5 ft. 6 in.	10 ft. 0 in.	2 ft. 10 in.	3 ft. 4 in.	5 ft. 8 in.	30	8½	140	8	5000 lbs.	15000 lbs.	17000 lbs.
Gehony	6 ft. "	6 ft. 6 in.	11 ft. 0 in.	3 ft. 1 in.	4 ft. 2 in.	6 ft. 7½ in.	36	9½	110	10	9700 lbs.	25500 lbs.	28000 lbs.
Gehave	6 ft. Elev.	8 ft. 0 in.	14 ft. 0 in.	3 ft. 9½ in.	4 ft. 7½ in.	7 ft. 7 in.	32	12½	165	15	14200 lbs.	44000 lbs.	48000 lbs.

Subject to change without notice.

The five-foot Mill is made sectional, for mule back transportation, so that no piece exceeds 350 pounds in weight, and only five pieces exceed 300 pounds in weight.

The 3½-foot Mill is made sectional also, so that no piece exceeds 350 pounds in weight except the ring die, weight 450 pounds.

IMPROVED HUNTINGTON MILLS



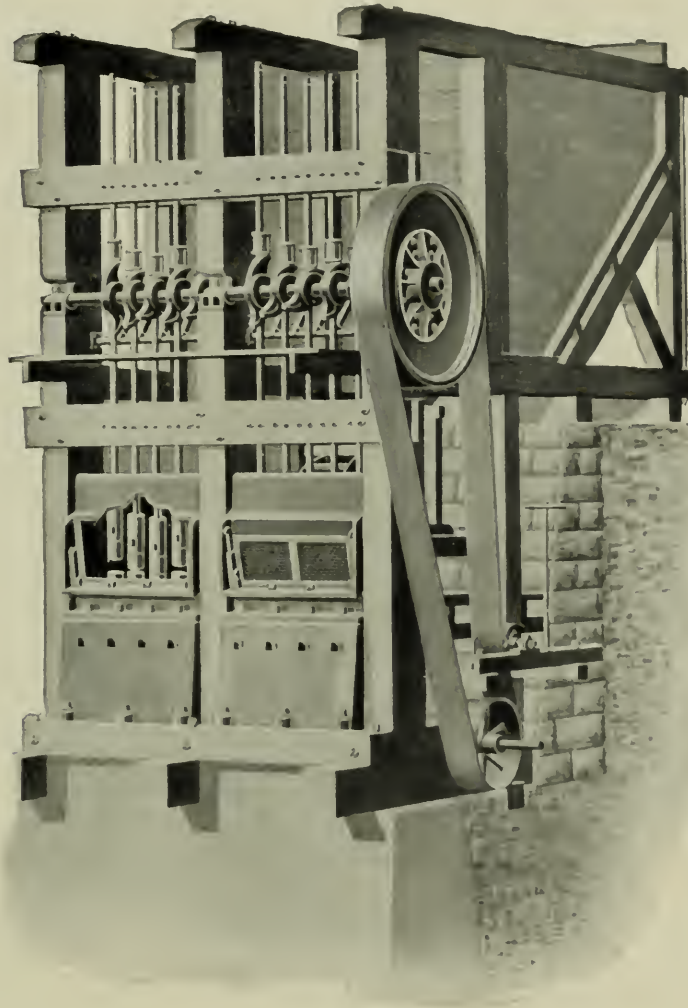
Special Heavy Duty Huntington Mill.

6 foot size only.

Code Word "Gehave."

See Specifications page 27.

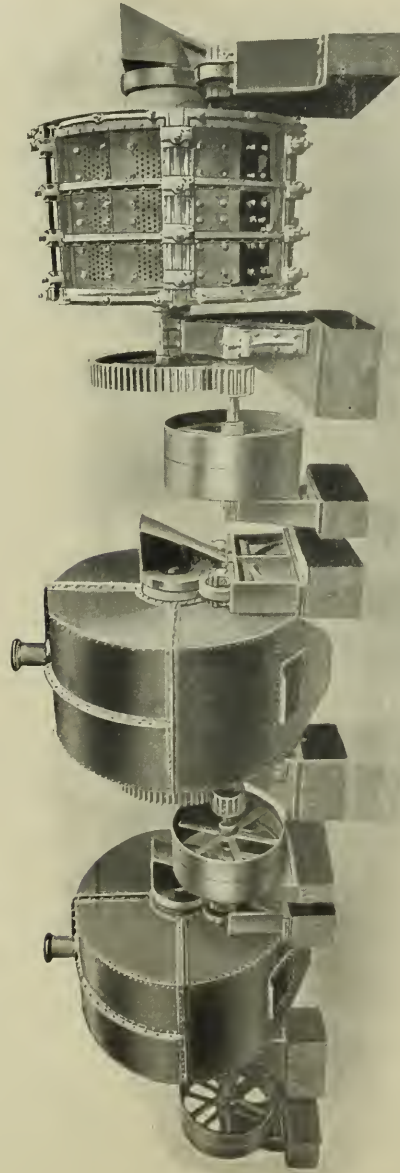
STAMP MILLS



Regular Ten-Stamp Battery with Mortars set on Cast Iron Blocks
and Concrete Foundation.

All sizes and styles to suit varying conditions.

BALL MILLS



Ball Mills

For Cement or Mining are Economical Pulverizers.

Send for Catalogue No. 76.

TUBE MILLS

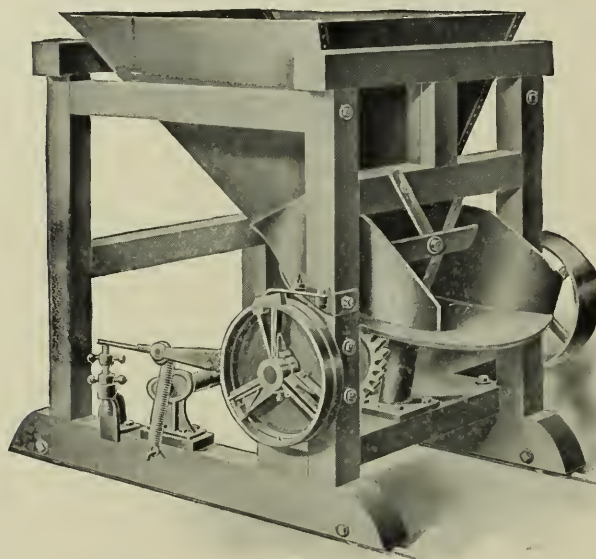


Tube Mill.

For fine Grinding of Cement, Rock or Ore.

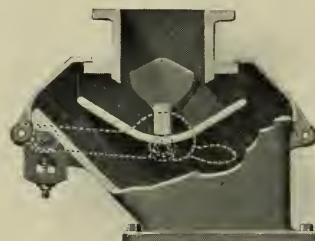
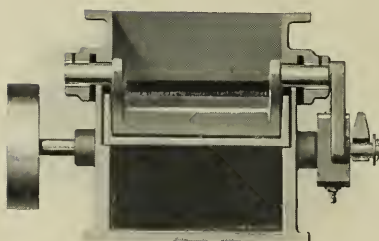
Send for Catalogue No. 76.

AUTOMATIC FEEDERS



Send for Catalogue No. 72.

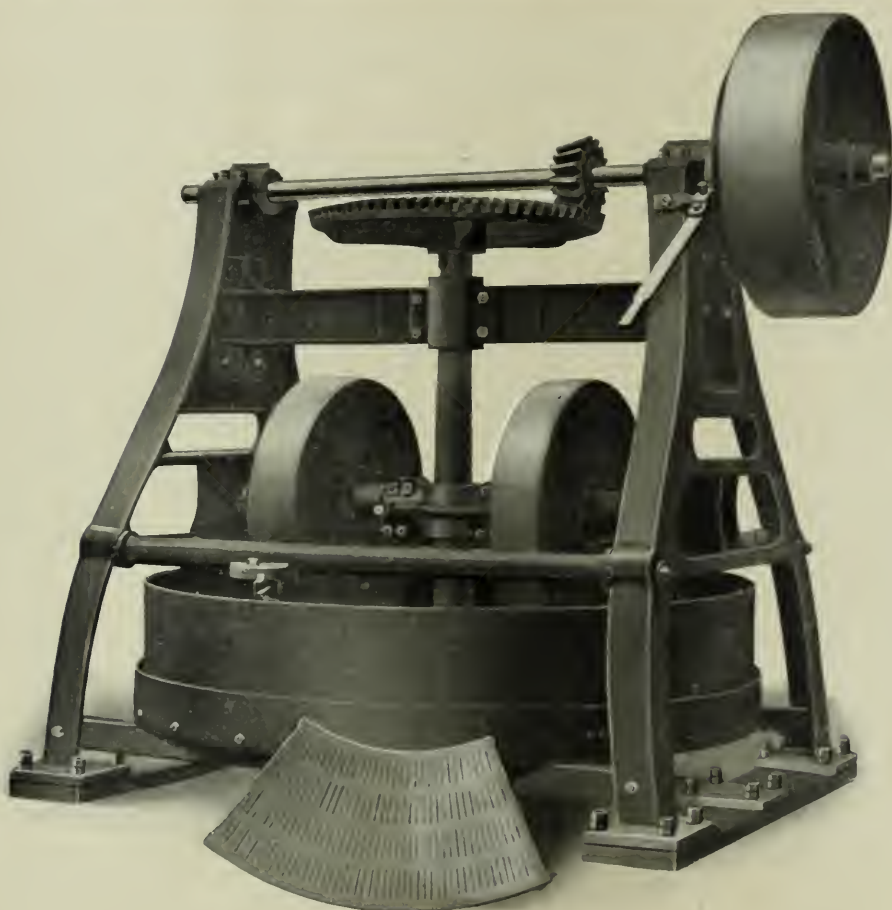
Belt Driven Challenge Ore Feeder.



Automatic Swing Feeder.

Send for Catalogue No. 65.

PAN MILLS



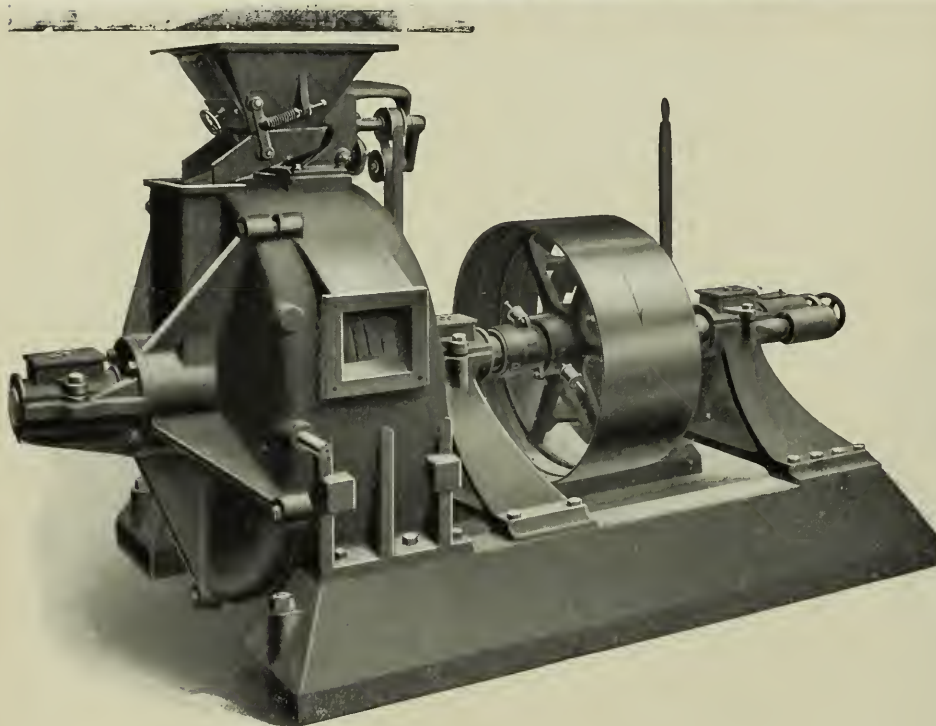
Dry and Wet Pan Mills.

Send for Catalogue No. 71.

Diam.	Floor Space	Height	Size Mullers	Pulley	Pulley Speed	Weight Approx. Net	Weight Approx. Gross	Approx. H. P.	Code Word Dry Pan	Code Word Wet Pan
Ft.	Ft.	Ft.	In.	In.	R. P. M.	Lbs.	Lbs.			
5	5 x 7	8	28 x 5	20 x 6	150	6000	7100	8	Drypan	
7	7 x 9	9	37 x 8	40 x 10	150	15000	17000	15	Drying	Wetpan
8	8 x 9	11	46 x 8	4 x 12	150	29000	32000	20		Wetpong
9	9 x 10	11	46 x 10	48 x 12	142	31000	35000	35	Dryond	

Subject to change without notice.

VERTICAL EMERY MILLS



Patented

For the fine reduction of soft and moderately hard materials.

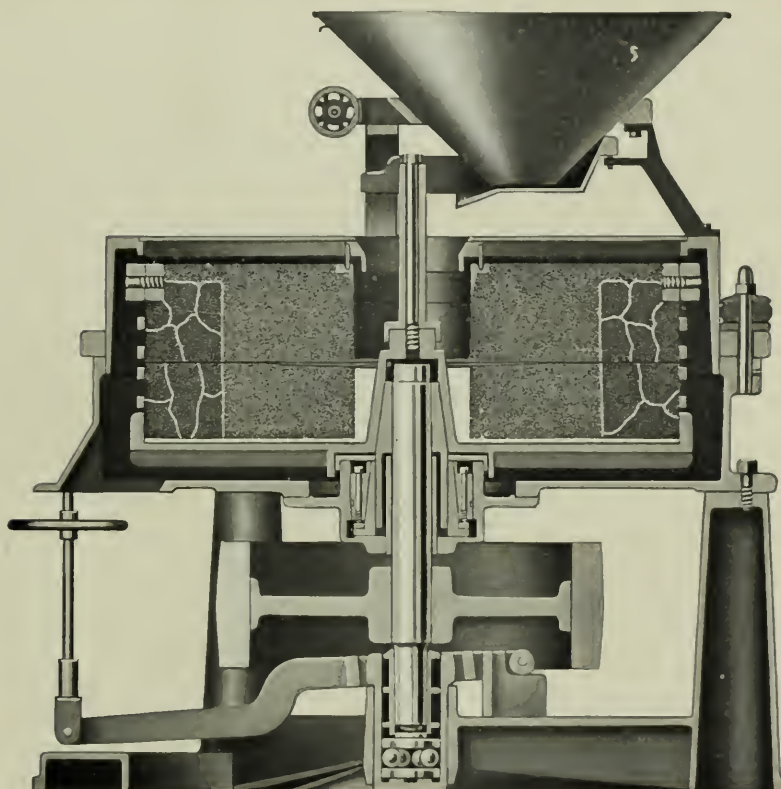
Grinds to 100 mesh without screens.

Send for Catalogue No. 64.

Code Word	Size	Length with Track	Length without Track	Width	Height	Pulley in	Speed Rev.	Approx. Horse Power	Cap. per Hour acc. to mat'r & fineness	Approx. Weight nett	Approx. Weight Gross
LABAB	24 in.	10ft. 3in.	5ft. 8in	2ft. 10in.	4ft.	20 x 6	750	12 to 15	½ to 2 tons	2000 lbs.	2300 lbs.
LACOF	30 in.	11ft. 6in.	6ft. 2in.	3ft. 5in.	4ft. 6in.	20 x 8	650	18 to 20	1 to 4 tons	3500 lbs.	4300 lbs.
LADRI	36 in.	14ft. 6in.	9ft. 4in.	4ft.	5ft. 1in.	30 x 12	550	30 to 35	2 to 7 tons	6000 lbs.	7000 lbs.
LADOS	42 in.	17ft. 6in.	11ft.	5ft.	6ft.	36 x 16	450 to 500	45 to 80	5 to 15 tons	12000 lbs.	13000 lbs.

Subject to change without notice.

HORIZONTAL EMERY MILLS



Patented

For the fine reduction of the harder materials.

Grinds to 100 mesh without Screens.

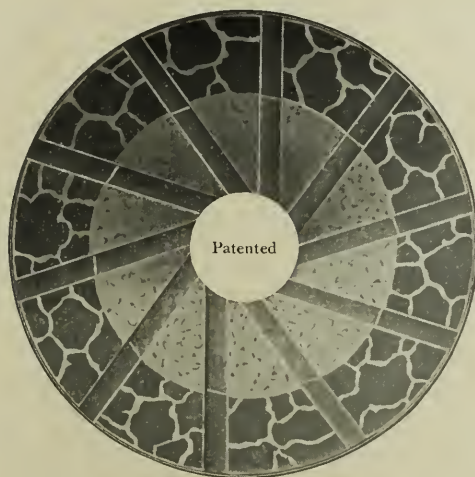
Send for Catalogue No. 64.

* Code Word without Idlers	Style of Mill	Tons Cap. per Hour Approx.	Approx. Horse Power	Speed Revs.	Pulley Dia. Face	Length	Width	Approx. Height	Approx. Weight lbs. Nett.	Approx. Weight lbs. Gross
MAABA	Direct Runner	1 to 3	18	350	30x10 in.	4ft. 11 in.	4ft. 11 in.	6 ft.	5500 lbs.	5850 lbs.

* With Idlers add the Word "Mafo."

Subject to change without notice.

ROCK EMERY MILL STONES



Made to fit any Mill Frame. Fastest Grinders known.

Send for Catalogue No. 64.

For the reduction of a great variety of substances *below quartz* in hardness, and to a fineness not possible with rolls, we illustrate a Millstone having a grinding surface composed of *large blocks of Emery set in metal*. It is hardly necessary to state that this Millstone possesses remarkable properties.

The Sturtevant grinding Mills that carry Rock Emery Millstones are of original design, and on materials suited to them, are the fastest fine grinders known. (Send for Catalogue No. 64.)

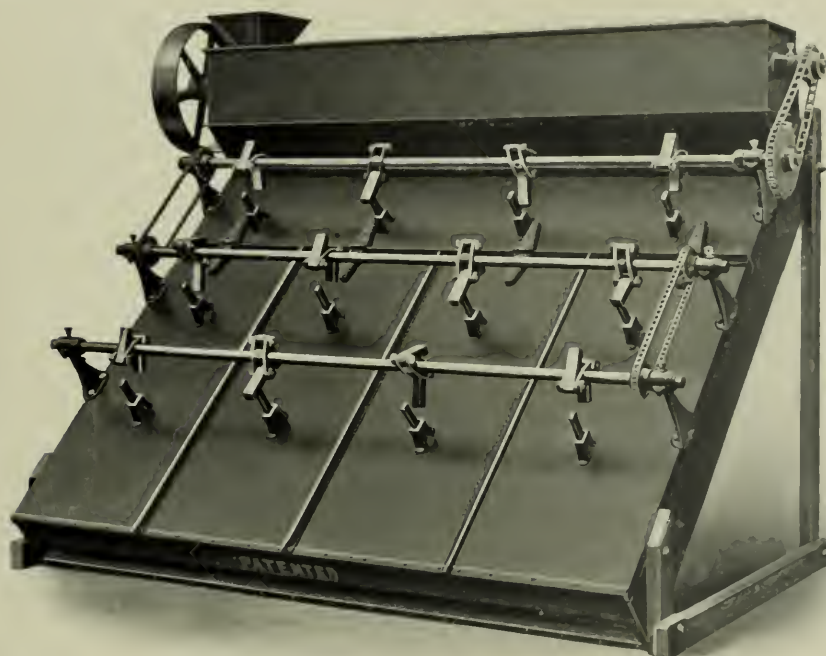
(For Vertical Emery Mills, to Fit Sturtevant Frames.)

				Code Word
24 inch	.	.	.	Kable
30 "	.	.	.	Kabric
36 "	.	.	.	Kacada
42 "	.	.	.	Kair

(For Horizontal Mills.)

				Code Word
30 inch	.	.	.	Kespr
36 "	.	.	.	Kever
42 "	.	.	.	Keyop
48 "	.	.	.	Kezip
54 "	.	.	.	Kexof

SCREENS



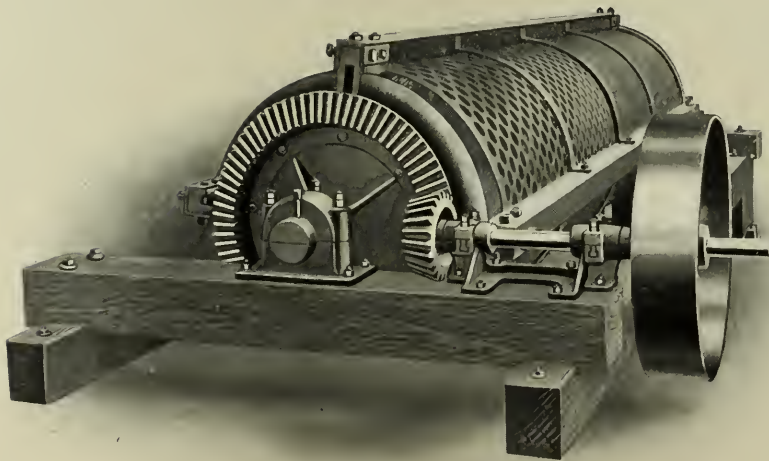
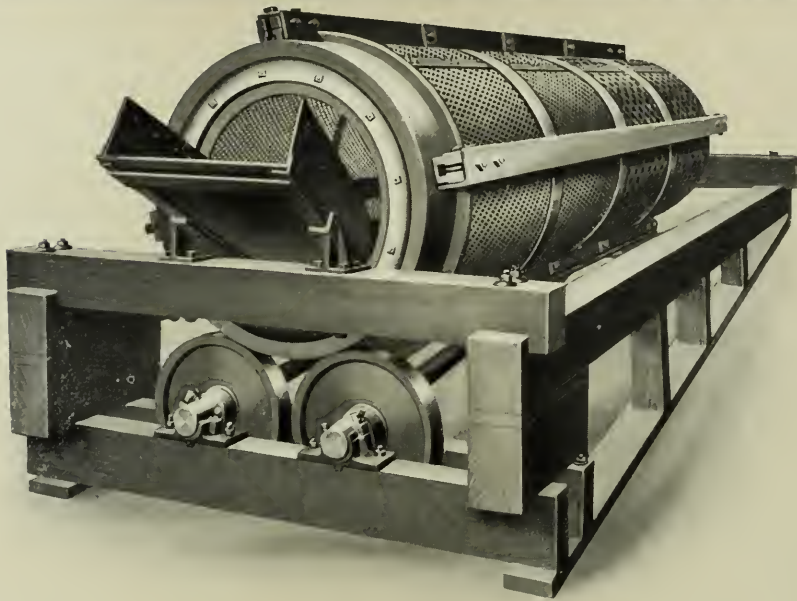
An Inclined Vibrating Screen equally good on very fine or coarse work.

Send for Catalogue No. 77.

SPECIFICATIONS.

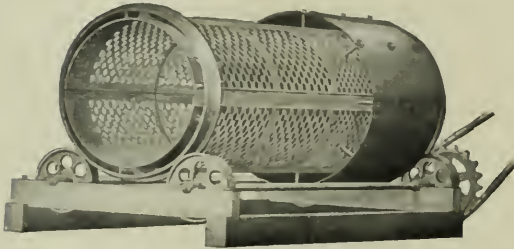
No. of Separator	Width Over All	Length Over All	Height Over All	Driving Pulley	Driving Pulley Speed	Screening Surface	Approx. Weight lbs. Net	Approx. Weight lbs. Gross	Code Word With One Screening Surface	Code Word With Two Screening Surfaces
	Ft. In.	Ft. In.	Ft. In.	Inches	Rev.	Feet				
1	5 6	6 0	7 3	18 x 3	110	4 x 6	1200	1700	Waygo	Two-waygo
2	5 6	8 0	7 3	18 x 4	110	6 x 6	1550	2000	Wayne	Two-wayne
3	5 6	10 0	7 3	18 x 4	110	8 x 6	1800	2500	Waide	Two-waide

SCREENS



Heavy Duty Screens, made in all sizes.
Send for Catalogue No. 74.

SCREENS



All Kinds.

For All Work.



Elevators.

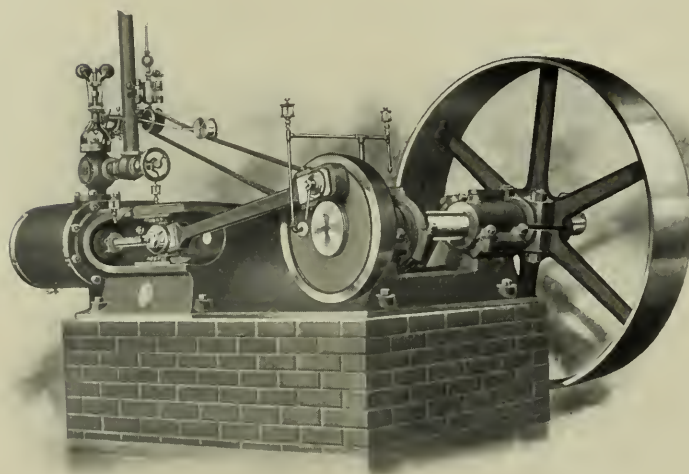


Grizzley's.

Screens and Elevators, all sizes. Send for Catalogue No. 74.

STEAM ENGINES

Medium Speed Throttling Engines.



Front View Self-Contained Engine—Class No. 100.

Send for Catalogue No. 70.

Cyl. Dimen.		Stand. No. Rev. per Minute	Range of H. P. at Standard Speeds with different Steam Pressures	Band Wheel		Approx. Floor Space Req.		Approx. Shipping Weight Pounds	Code Name Left-Hand Engine	Code Name Right-Hand Engine
Diam. In.	Stroke In.			Diam. In.	Width Face In.	Length In.	Width In.			
7	10	240	15 to 20	40	8½	79	53	1600	Gabble	Habit
8	10	240	20 " 25	40	10½	79	53	1700	Gadfly	Haddock
9	12	220	25 " 31	48	12½	94	64	3000	Gainful	Haggard
10	12	220	30 " 38	48	12½	94	64	3200	Galaxy	Halter
10	14	200	35 " 43	60	14½	112	70	3800	Gallows	Hamlet
11	14	200	40 " 50	60	14½	112	70	4000	Gammon	Harbor
12	16	180	50 " 62	72	17	128	77	5500	Gander	Hatter
13	16	180	60 " 75	72	17	128	77	5700	Garter	Haul
14	18	160	80 " 100	78	19	144	88	7800	Gawk	Haven
16	20	145	100 " 130	84	21	161	100	11000	Gay	Hawk
18	22	130	125 " 165	96	23	178	118	14500	Gazelle	Hazel

Subject to change without notice.

BOILERS

Stationary Tubular Boilers.

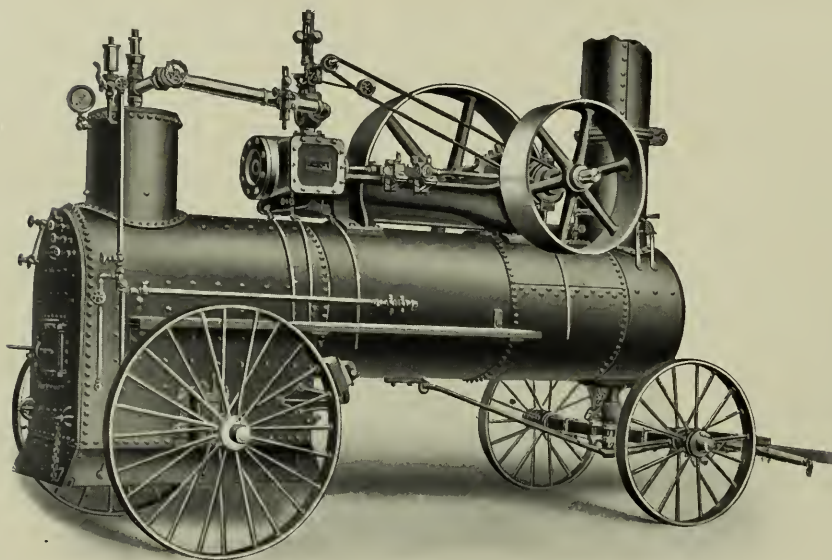


Send for Catalogue No. 70.

Rated Horse Power	SHELL		TUBES			GRATE SURFACE		STACK		Approx. Shipping Wt. Lbs.		CODE NAME
	Diam. In.	Length Ft.	Number	Diam. In.	Length Ft.	Length In.	Width In.	Diam. In.	Length Ft.	Naked Boil. with Dome and Sm'ke Hd.	Boiler with Fixtures	
15	36	8	24	3	8	30	30	16	25	2475	3700	Jaconet
20	36	10	24	3	10	36	30	16	30	2950	4300	Jade
25	36	12	24	3	12	42	30	16	35	3400	4800	Jay
30	40	12	30	3	12	48	36	18	35	3850	5500	Japan
35	44	12	36	3	12	48	42	20	35	4525	6400	Jargon
40	48	12	42	3	12	48	42	22	35	5175	7100	Jealous
50	48	14	36	3½	14	54	42	22	40	6125	8300	Jeans
60	54	14	42	3½	14	54	48	26	40	7575	10300	Jesuit
70	54	16	36	4	16	60	48	26	40	8725	11600	Jetteau
80	60	16	44	4	16	60	54	28	46	10450	13800	Jockey
100	66	16	54	4	16	60	60	32	46	13075	17000	Jovial
125	72	16	70	4	16	60	66	36	46	16350	20600	Judge
150	72	18	70	4	18	60	72	36	51	17850	22400	Judgment

Subject to change without notice.

STEAM ENGINES



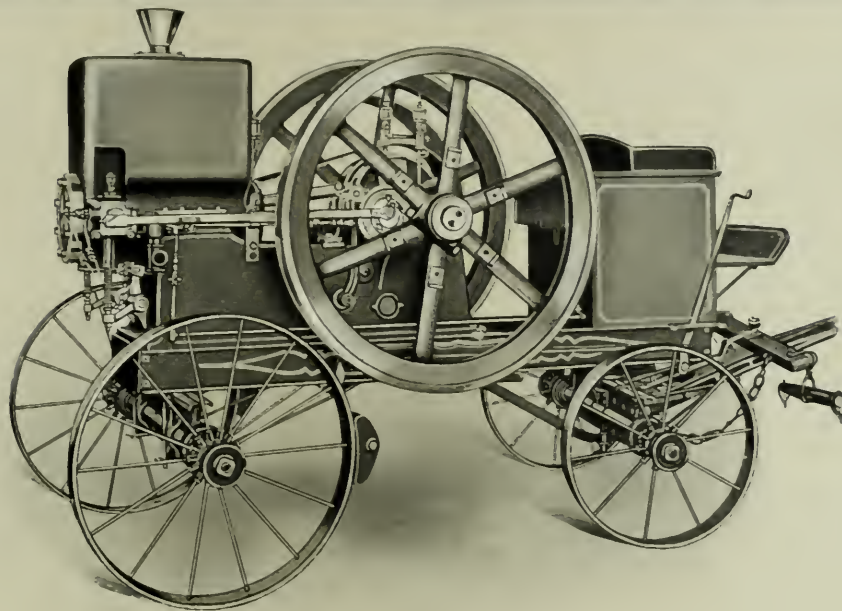
Portable Engines on sills or wagon.

Send for Catalogue No. 70.

TELEGRAPH CODE	HORSE POWER	CYLINDER							BOILER				STACK		F. Wheel		Small Pulley		Estimated Weight On Sills	Estimated Weight On Wagon
		Bore and Length of Stroke	Diameter	Length of Firebox in in.	Width of Firebox in in.	Height of Firebox in in.	Number and Size of Tubes	Length of Tubes in in.	Diameter of Stack in in.	Length in feet on sills	Length in feet on Wagon	Diameter in inches	Width of Face in inches	Diameter in inches	Width of Face in inches	Revolutions per Minute	Estimated Weight On Sills	Estimated Weight On Wagon		
Zebany	4	4½ x 6	22	30	18	26	20-2 in.	44	8	12	8	30	5	16	6	225	2300	3100		
Zebance	5	5 x 6	22	30	18	28	22-2 in.	48	8	12	8	33	6	16	6	215	2650	3450		
Zebra	6	5½ x 8	22	30	18	28	22-2 in.	60	9½	14	8	36	6	16	6	205	3200	4100		
Zebtron	8	6½ x 8	24	30	20	28	28-2 in.	60	10	14	8	36	8	16	8	205	3450	4450		
Zeborg	10	7 x 10	26	37	22	29	32-2 in.	63	10	14	9	44	8	18	8	180	4100	5200		
Zebode	12	7¾ x 10	30	41	25	30	36-2 in.	68	12	16	9	44	8	18	8	180	5500	6900		
Zeboter	15	8½ x 11	33	41	28	34	28-3 in.	76	15	18	10	48	10	30	8	175	6850	8300		
Zebosten	18	9 x 11	33	41	28	34	32-3 in.	82	15	20	10	48	12	30	8	170	7500	9000		
Zebosin	20	9¼ x 12	36	49	31	36	32-3 in.	90	18	20	16	60	12	36	10	150	8600	10300		
Zebo	25	10 x 12	36	49	31	36	35-3 in.	99	18	20	18	60	13	48	10	150	9500	11100		
Zeboral	30	10 x 15	39	52	34	40	40-3 in.	102	20	22	18	66	14	48	12	130	10300	12500		
Zebotz	35	11 x 15	39	52	34	40	40-3 in.	120	20	22	18	72	15	48	12	130	11900	13500		
Zebbing	40	12 x 15	42	58	36	44	50-3 in.	108	22	24	24	72	16	54	12	125	12500	14000		
Zebbon	50	13 x 16	48	58	42	50	64-3 in.	120	26	30	30	84	16	54	12	120	14300	15800		

Subject to change without notice.

GASOLINE ENGINES



Send for Catalogue No. 70.

PORTABLE GASOLINE ENGINE.

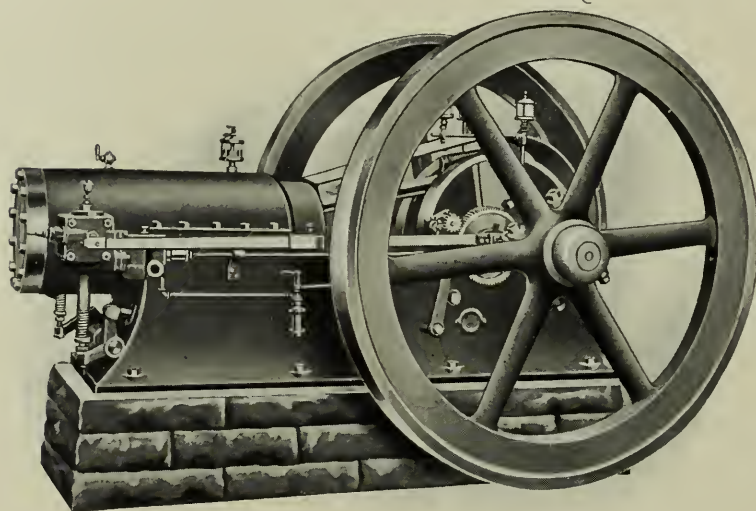
The above illustration shows the only first-class Portable Gasoline Engine for operating crushing plants.

It is perfectly reliable, compact, and easy to run. Every part is accessible. The ignition is especially sure; the water jacketing and circulation are ample to ensure cool running without fan or pump. It is unusually free from piping which in other engines cause trouble by freezing, leaking and crystalization from the jar caused by being hauled over rough roads. The Gasoline tank is under the driver's seat, convenient for filling and is of ample capacity for the average day's run. No danger from fire as the electric ignition is enclosed.

Code Word	H. P.	Approx. Weight net	Approx. Weight gross	Friction Clutch Pulley	Speed of Engine
Habrot	5	2300 lbs.	2800 lbs.	24 in. x 6 in.	320 rev.
Habter	7	2800 lbs.	3500 lbs.	24 in. x 5 in.	310 rev.
Habbet	9	3200 lbs.	4000 lbs.	26 in. x 6 in.	300 rev.
Habcroe	11	3400 lbs.	4500 lbs.	30 in. x 7 in.	290 rev.
Oaklin	13	4000 lbs.	5800 lbs.	32 in. x 9 in.	280 rev.
Oakman	15	4800 lbs.	6200 lbs.	34 in. x 9 in.	270 rev.
Oaknot	18	5000 lbs.	7000 lbs.	36 in. x 9 in.	260 rev.
Oakout	22	6500 lbs.	9000 lbs.	40 in. x 10 in.	240 rev.
Oakpon	26	7500 lbs.	10000 lbs.	40 in. x 10 in.	230 rev.

We also supply smaller Engines in Portable form, and Stationary Engines in all sizes.

GASOLINE ENGINES



Send for Catalogue No. 70.

List of Sizes and Dimensions of Horizontal Gas, Gasoline and Distillate Engines.

CODE WORD	ACTUAL H. P.	SPEED OF ENGINE	Approx Wt. lbs. Net	Approx. Wt. lbs. gross	SIZE REGULAR PULLEY
Hooba	2	390	1000	1400	10 x 6
Hobety	3	380	1200	1600	10 x 6
Hockey	4	330	1500	1900	10 x 8
Hodkin	5	320	1700	2200	12 x 9
Hoeny	7	310	2100	2600	12 x 10
Hofter	9	300	2500	3200	16 x 10
Hogant	11	290	3000	3800	16 x 10
Hogency	13	280	3800	5000	16 x 10
Hosen	15	270	4100	5200	20 x 12
Hollet	18	260	4500	5600	24 x 12
Hokeyle	22	240	6000	7100	24 x 14
Homen	26	230	6800	8000	32 x 8
Honet	30	220	7200	8400	36 x 9
Hopgey	35	200	8000	9200	40 x 10
Hoquest	40	185	9000	10200	44 x 10
Horden	50	179	15000	16500	54 x 13
Hotany	80	160	21000	22800	66 x 16

